

CAN COVER WITH A STAY-ON TAB

RELATED U.S. APPLICATIONS

Not applicable.

STATEMENT REGARDING FEDERALLY SPONSORED  
RESEARCH OR DEVELOPMENT

Not applicable.

REFERENCE TO MICROFICHE APPENDIX

Not applicable.

FIELD OF THE INVENTION

[0001] The present invention relates to a can cover or a can top with a stay-on tab. Particularly the invention relates to a can cover having a stay-on tab which can be easily pulled upward with a finger.

BACKGROUND OF THE INVENTION

[0002] A cover of a can containing a drink is usually provided with a stay-on tab thereon. Figs. 9 and 10 show a conventional can cover 1 with a stay-on tab 3. The conventional stay-on tab 3 is attached to the upper surface of the can cover 1 by a supporting means 5 protruding upward from said can cover 1, said stay-on tab 3 being in close contact with the upper surface of said can cover 1, said can cover 1 being provided under one end 3a of said stay-on tab 8 with scores 7 for inducing rupture, said one end 3a of said stay-on tab 3 being adapted to push downward a portion 8 surrounded by said scores 7 so as to form a content take-out hole when another end 3b of said stay-on tab 3 is pulled upward from said upper surface of said can cover 1.

[0003] In the conventional stay-on tab 3, said supporting means 5 is connected to a central portion 3c of said stay-on tab 3, said central portion 3c being continued to said one end 8a of said stay-on tab 3 and separated from said another end 3b of said stay-on tab 3 so that said another end 3b can be pulled upward from said upper surface of said can cover 1 while said central portion 3c remains in close contact with said upper surface of said can cover 1. There is an opening 9 between said central portion 3c of said stay-on tab 3 and said another end 3b thereof. Said opening 9 is formed by cutting off a portion of the material corresponding thereto.

[0004] However, the conventional can cover with said stay-on tab has the following disadvantages:

[0005] Since the stay-on tab is in close contact with the upper surface of the can cover, it is very difficult to insert a finger between the stay-on tab and the upper surface of the can cover in order to pull upward said another end of the stay-on tab.

[0006] The stay-on tab is likely to be turned in a horizontal direction by an external cause during the transportation, storage, etc. of the can. In such a case, it is often difficult to open the can.

[0007] Since said central portion of said stay-on tab is separated from said another end of said stay-on tab, the stay-on tab may be broken when said another end is pulled upward from the upper surface of said can cover.

## BRIEF SUMMARY OF THE INVENTION

[0008] It is therefore an object of the invention to provide a can cover with a stay-on tab, which has obviated all of the above-mentioned disadvantages of the prior art.

[0009] It is another object of the invention to provide a can cover with a stay-on tab, in which it is very easy to insert a finger between the stay-on tab and the upper surface of the can cover in order to pull upward said another end of the stay-on tab.

[0010] It is a further object of the invention to provide a can cover with a stay-on tab, which tab is prevented from being turned in a horizontal direction by an external cause during the transportation, storage, etc. of the can.

[0011] It is a further object of the invention to provide a can cover with a stay-on tab, which tab is prevented from being broken when said another end of the stay-on tab is pulled upward from the upper surface of said can cover.

[0012] These and other objects have been attained by a can cover with a stay-on tab, said stay-on tab being attached to an upper surface of said can cover by a supporting means protruding upward from said can cover, said can cover being provided under one end of said stay-on tab with scores for inducing rupture, said one end of said stay-on tab being adapted to push downward a portion surrounded by said scores so as to form a content take-out hole when another end of said stay-on tab is pulled upward, said supporting means being connected to a central portion of said stay-on tab, said central portion of said stay-on tab being continued to said one end of said stay-on tab and separated from said another end of said stay-on tab so that said another can be pulled upward from said upper surface of said can cover while said central portion remains in close contact with said upper surface of said can cover, wherein said one end and said another end of said stay-on tab are respectively inclined upward from said upper surface of said can cover so that there are distances between said one end of said stay-on tab and said upper surface of said can cover and between said another end of said stay-on tab and said upper surface of said can cover, the distance between said another end of said stay-on tab and said upper surface of said can cover being made larger when said one end of said stay-on tab is pushed downward toward said upper surface of said can cover.

[0013] There is always a distance between said another end of the stay-on tab and the upper surface of the can cover. This distance becomes larger when said one end of the stay-on tab is pushed downward

toward the upper surface of the can cover. In other words, the stay-on tab moves like a seesaw. When said one end of the stay-on tab is pushed down, said another end of the stay-on tab is moved upward. Therefore, it is very easy to insert a finger between said another end of the stay-on tab and the upper surface of the can cover in order to pull upward said another end of the stay-on tab.

[0014] Said supporting means protruding upward from said can cover preferably has an elliptic or polygonal section so as to prevent said stay-on tab being turned in a horizontal direction.

[0015] Alternatively, an auxiliary supporting means protruding upward from said can cover is provided beside said supporting means, said auxiliary supporting means being connected to said central portion of said stay-on tab, said auxiliary supporting means passing through said central portion and protruding upward from said central portion.

[0016] An upper end of said auxiliary supporting means is preferably spread so as to form a head.

[0017] Said can cover preferably has wrinkles so as to prevent said can cover from being swelled upward by the expansion of the content of the can.

[0018] The can cover is often swelled upward by the expansion of the content of the can. This is likely to occur when the can contains a beer, a soda water, etc. If the can cover is swelled upward, it may be impossible to provide a stay-on tab having one end and another end thereof respectively inclined upward from the upper surface of the can cover.

[0019] Said central portion of said stay-on tab is separated from said another end of said stay-on tab preferably by cutting the material along the periphery of said central portion and folding the cut edge of the material back to said another end of said stay-on tab.

[0020] An opening is formed between said central portion of the stay-on tab and said another end thereof. However, the material corresponding to the opening is not cut off but folded back to said another

end of the stay-on tab. Therefore, the stay-on tab is reinforced and prevented from being broken when said another end of the stay-on tab is pulled upward from the upper surface of the can cover.

#### BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0021] Fig. 1 is a perspective view showing an example of a can cover according to the present invention.

[0022] Fig. 2 is a sectional view of said can cover.

[0023] Fig. 3 is a sectional view showing can covers stacked.

[0024] Fig. 4 is a sectional view showing another example of said can cover.

[0025] Fig. 5 is a plan view showing a modified example of a stay-on tab.

[0026] Fig. 6 is an enlarged sectional view taken along line VI-VI of Fig. 5.

[0027] Fig 7 is a plan view showing another example of said stay-on tab.

[0028] Fig. 8 is a sectional view showing a can cover having said stay-on cover of Fig. 7.

[0029] Fig. 9 is a plan view showing a conventional stay-on tab.

[0030] Fig. 10 is a sectional view showing a conventional can cover having said stay-on tab of Fig. 9.

#### DETAILED DESCRIPTION OF THE INVENTION

[0031] The present invention will now be described in detail with reference to Figs. 1 to 8.

[0032] A can 11 comprises a can body 13 and a can cover 15,. The can cover 15 is provided on its upper surface with a stay-on tab 17.

[0033] The stay-on tab 17 is attached to the upper surface of the can cover 15 by a supporting means 19 protruding upward from the can cover 15. The can cover 15 is provided under one end 17a of the stay-on tab 17 with scores 21 for inducing rupture. Said one end 17a of the stay-on tab 17 is adapted to push

downward a portion 23 surrounded by said scores 21 so as to form a content take-out hole when another end 17b of the stay-on tab 17 is pulled upward. See Fig. 2. The supporting means 19 is connected to a central portion 17c of the stay-on tab 17.

[0034] The central portion 17c of the stay-on tab 17 is continued to said one end 17a of the stay-on tab 17 and separated from said another end 17b of the stay-on tab 17 so that said another end 17b can be pulled upward from the upper surface of the can cover 15 while said central portion 17c of the stay-on tab 17 remains in close contact with the upper surface of the can cover 15. There is an opening 25 between said central portion 17c of the stay-on tab 17 and said another end 17b of the stay-on tab 17.

[0035] According to the present invention, said one end 17a and said another end 17b of the stay-on tab 17 are respectively inclined upward from the upper surface of the can cover 15 so that there are distances 27, 29 between said one end 17a of the stay-on tab 17 and the upper surface of the can cover 15 and between said another end 17b of the stay-on tab 17 and the upper surface of the can cover 15. The distance 29 between said another end 17b of the stay-on tab 17 and the upper surface of the can cover 15 is made larger when said one end 17a of the stay-on tab 17 is pushed downward toward the upper surface of the can cover 15. The stay-on tab 17 moves like a seesaw. See Fig. 2. .

[0036] It is to be noted that said one end 17a and said another end 17b of the stay-on tab 17 are respectively inclined upward from the upper surface of the can cover 15 within such an extent that the stay-on tab 17 do not hinder stacking can covers 15. See, Fig. 3.

[0037] The supporting means 19 protruding upward from the can cover 15 preferably has an elliptic or polygonal section so as to prevent the stay-on tab 17 from being turned in a horizontal direction by an external cause during the transportation, storage etc. of the can 11. The supporting means 19 shown in Fig. 5 has an elliptic section.

[0038] In an embodiment shown in Figs. 7 and 8, an auxiliary supporting means 31 protruding upward from the can cover 15 is provided beside said supporting means 19. The auxiliary supporting means 31 is connected to said central portion 17c of the stay-on tab 17. The auxiliary supporting means 31 passes through said central portion 17c of the stay-on tab 17 and protrudes upward from said central portion 17c.

[0039] An upper end 31a of said auxiliary supporting means 31 is preferably spread so as to form a head.

An upper end 19a of said supporting means 19 is also spread so as to form a head.

[0040] In an embodiment shown in Fig. 4, said can cover 15 has wrinkles or grooves 33 so as to prevent the can cover 15 from being swelled upward by the expansion of the content of the can 11.

[0041] In an embodiment shown in Figs. 5 and 6, said central portion 17c of the stay-on tab 17 is separated from said another end 17b of the stay-on tab 17 by cutting the material along the periphery 18 of said central portion 17c and folding the cut edge 20 of the material back to said another end 17b of the stay-on tab 17. In this embodiment, said opening 25 is formed between said central portion 17c of the stay-on tab 17 and said another end 17b thereof. However, the material corresponding to the opening 25 is not cut off but folded back to said another end 17b of the stay-on tab 17.

[0042] The present invention has the following advantages:

[0043] There is always a distance between said another end of the stay-on tab and the upper surface of the can cover. This distance becomes larger when said one end of the stay-on tab is pushed downward toward the upper surface of the can cover. Therefore, it is very easy to insert a finger between said another end of the stay-on tab and the upper surface of the can cover in order to pull upward said another end of the stay-on tab.

[0044] The stay-on tab is prevented from being turned in a horizontal direction by an external cause during the transportation, storage, etc. of the can when said supporting means protruding upward from

· said can cover has an elliptic or polygonal section, or when said auxiliary supporting means protruding upward from said can cover is provided beside said supporting means.

**[0045]** When the can cover has wrinkles so as to prevent said can cover from being swelled upward by the expansion of the content of the can, the above-mentioned stay-on tab can be attached to the can cover without hindrance.

**[0046]** When the central portion is separated from said another end of the stay-on tab by cutting the material along the periphery of said central portion and folding the cut edge of the material back to said another end of the stay-on tab, the tab is reinforced and prevented from being broken when said end of the stay-on tab is pulled upward from the upper surface of the can cover.

**[0047]** As many apparently widely different embodiments of the present invention may be made without departing from the spirit and scope thereof, it is to be understood that the invention is not limited to the specific embodiments thereof except as defined in the appended claims.